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TITLE:

Method for activating dopants

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PATENT-ASSIGNEE: HYNIX SEMICONDUCTOR INC[HYNIN]

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PATENT-FAMILY:

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APPLICATION-DATA:

PUB-NO APPL-DESCRIPTOR APPL-NO

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ABSTRACTED-PUB-NO: KR2003002424A

BASIC-ABSTRACT:

NOVELTY - A method for activating dopants is provided to easily control the

temperature compared to the conventional RTA(Rapid Thermal Annealing) method by

locally heating a silicon substrate by using a laser.

DETAILED DESCRIPTION - In order to activate a p-type or n-type dopants in a

silicon substrate(10), an $\underline{infrared\ laser}$ (20) having a desired wavelength is

irradiated into the silicon substrate(10). At this time, the wavelength of the

infrared laser(20) is determined by a vibration mode of silicon. By analyzing

infrared absorption spectrum, the vibration mode of silicon is calculated.

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Preferably, the wavelength of the infrared laser(20) is 16-17 micrometer.

CHOSEN-DRAWING: Dwg.1/10

TITLE-TERMS: METHOD ACTIVATE DOPE

DERWENT-CLASS: U11

EPI-CODES: U11-C03D;

